08/30/96

094

ORIGINAL CONTRACT DO NOT REMOVE FROM THIS ROOM

Letting

August 30, 1996

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond



Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 92377 Sangamon County Section 102(X,BR,B-3,B-4,B-5) Project ACBRF-ACSTPF-658(13) FAP Route 658 (IL 29) District 6 Construction Funds

EXECUTION OF THIS CONTRACT DOES NOT NECESSARILY SIGNIFY APPROVAL OF THE BIDDER'S EMPLOYEE UTILIZATION FORM, NOR DOES THE EXECUTION RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES UNDER PART III. AFFIRMATIVE

THE CONTRACTOR WILL BE NOTIFIED IN WRITING OF THE APPROVAL OF HIS FORM. NO WORK WILL COMMENCE UNTIL HE AS RECEIVED OFFICIAL NOTIFICATION.

ORIGINAL		
CONTRACTO		
BONDING C		
CONTR. OFF		
COMPT.	DIST.	
CERT.	MATLS.	
CHGO.LAB	MAINT.	

225 WORKING DAYS

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL (See instructions inside front cover) 11-29 - 08/30/96

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted July 1, 1994; the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", in effect on the date of invitation for bids; the "Standard Specifications for Traffic Control Items," adopted November 1, 1994, and the "Supplemental Specifications and Recurring Special Provisions" adopted February 1, 1996, indicated on the Check Sheet included herein which apply to and govern the construction of FAP Route 658 (IL 29), Section 102(X,BR,B-3,B-4,B-5), Project ACBRF-ACSTPF-658(13) in Sangamon County, and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK:

Section 102X: consists of constructing FAP Route 658 (IL 29) on a vertical and horizontal relocation and includes the removal of concrete gutter, paved ditch, pavement and slopewall, bituminous surface removal, construction of bituminous concrete widening, bituminous concrete surface course Mixture D, bituminous shoulders 200 mm and 220 mm in depth, concrete gutter (modified), subbase granular material 300 mm and variable depth, bituminous base course 300 mm and variable depth, and special bituminous shoulders 340 mm in depth for use as material to vertically relocated IL 29 in stages and under traffic on the south end of the project.

The section also includes tree removal, borrow and channel excavation, rock fill, porous granular embankment, lime modified soils, bituminous concrete pavement (full depth) 340 mm, the construction and removal of a detour on the north end of the project, the removal and reerection of steel plate beam guardrail, stone riprap, concrete revetment lined ditches, modular retaining wall systems, the removal of the existing Sangamon River bridge, the partial removal of a double 3.05 m x 2.44 m R.C. box culvert, the installation and removal of pipe culverts, the construction and landscaping of a wetland mitigation site, furnishing and placing topsoil, seeding, pavement marking, and all other miscellaneous and collateral work necessary to complete this portion of the contract.

<u>Section 102BR:</u> consists of repairs to the substructures of the existing overflow structure, end post repairs, and cleaning and painting the structural steel and steel I-beams.

<u>Section 102B-3:</u> consists of constructing a new Sangamon River on the relocated IL 29 alignment at Station 3+589.55 with four spans on three solid concrete piers and footings and a length of 266.94 m from back to back of abutments, a 14.2 m out to out concrete deck on 2.14 m composite web plate girders.

Section 102B-4: consists of constructing a new overflow structure on the relocated IL 29 alignment at Station 34+056.15 with three spans on two pile bent piers with solid concrete walls

erein and shall be confined to other locations on this project during calendar years 1997 and

The scheduled dates for the 1997 Air Rendezvous, and three events in 1998 are not available at this time. It shall be the Contractor's responsibility to contact the officials of the three events for the dates. The following is a schedule for the public events that affect the construction of this project:

Event ~	<u>1997</u>	<u>1998</u>
Bloomington Gold	June 27-29	not available
Air Rendezvous	not available	not available
Illinois State Fair	August 8-17	not available

There shall be no construction activity within 1 m of the through edges of the traveled lanes of the existing or proposed IL 29 pavement or on the detour.

There shall be no construction activity to construct the vertical and horizontal relocation of existing IL 29 from Station 32+835 to 33+225± during periods of public events. It shall be the responsibility of the Contractor to plan the work in this area so that the elevation of the adjacent traffic lanes is the same on the completed portion of the subbase granular material or bituminous base course prior to suspending work during periods of public events so that a free flow of two-way traffic can be maintained. The Contractor's attention is called to the special provision for Subbase Granular Material (Special).

There shall be no lane encroachments or equipment crossing the traveled lanes of pavement. There shall be no resurfacing operations on IL 29.

No broken pavement, open holes or trenches shall remain on, or adjacent to, all traveled lanes of pavement during these events. Barricades, cones, drums or other warning devices shall also be removed from all traveled lanes of pavement during these periods with the exception of Traffic Control and Protection Standard 2310 on the detour constructed in Stage 2 and the area of horizontal and vertical relocation on IL 29 between Station 32+835 and 32+225± if they are under traffic during periods of public events. There shall be no traffic switches on IL 29 during periods of public events.

These periods shall begin at 4:00 p.m. on the day preceding the beginning day of each event and end at 12:00 midnight on the final day of each event.

The cost of any inconveniences or delays caused the Contractor in complying with this special provision shall be considered as included in the cost of this contract and no additional compensation will be allowed.

· 高州東京議構のでの東京中ででは東京があっているいとのであるからは大きないないのは、大学のないでは、

Sequence of Construction and Traffic Control: The following sequence of construction is intended to permit the construction of this section with the least inconvenience to the traveling public. The Contractor shall schedule his work so that his operations shall comply with the provisions of Keeping the Roads Open to Traffic, Aggregate for Temporary Access and the

lage construction details on the plans. Deviations from the sequence herein specified will not allowed without prior written approval from the Engineer.

Stage 1:

Construct the proposed downstream end of the channel change for the proposed Phase 1: double 3.0 m x 2.5 m R.C. box culvert LT of Station 35+057.966. Construct the double 1500 mm temporary pipe culverts for the detour.

Construct the proposed relocated levee for the detour stage and make the connection to the existing shoulder at LT Station 34+989. Traffic Control and Phase 2: Protection, Standard 2302 shall be installed and operational on IL 29 during construction operations on the shoulder.

Stage 2:

Construct the proposed detour from Station 0+00 to 0+774.922. Traffic Control and Protection, Standard 2311 shall be installed and operational on IL 29 when Phase 1: constructing the detour adjacent to the traveled lanes.

Maintain access to the entrances located adjacent to the detour onto existing IL 29 with Aggregate for Temporary Access.

Complete the installation of the Traffic Barrier Terminals Type 1 (Special) and Temporary Concrete Barriers on the detour. Traffic Control and Protection, Standard 2302, 2303 or 2305 on IL 29 when during guardrail removal operations. Install reflectorized drums, Type I or II barricades with flashing lights on the IL 29 shoulder at 15 m centers in accordance with the Supplemental Specification for Work Zone Traffic Control.

- Remove the existing guardrail from IL 29 and re-erect the guardrail on the detour at Phase 2: the locations shown on the plans.
- Complete the connections to the detour for the entrances shown on the plans and as noted in the special provision for Aggregate for Temporary Access. Complete Phase 3: the temporary lighting for the detour and install Traffic Control and Protection, Standard 2310.

Stage 3:

Open the detour to traffic and complete the staged construction on proposed IL 29 from Station 33+150 to 33+449.81±. Complete all construction on proposed IL 29 Phase 1: from Station 33+449.80± to 35+225±.

Complete the proposed construction on IL 29 from Station 32+600 to 32+950. The work from Station 32+835 to 32+950 in Stage 3, Phases 1 and 2 shall be done in Phase 2: accordance with the stage construction details as shown and noted on the plans.

Traffic Control and Protection: Traffic Control and Protection for the work from Station 32+600 to 32+950 in Stage 3, Phases 1 and 2 shall be in accordance with the appropriate traffic control and protection standards outlined as follows:

1. Tree removal - Standards 2302, 2305 and 2307

2. Earth Excavation, Topsoil Replacement, Embankment, Entrance Pipe Culvert Removal and Construction, Aggregate Base and Surface Course for Entrances, Stone Riprap and Concrete Revetment Mat for Ditch Lining, Modular Retaining Wall systems, Longitudinal Underdrains, Concrete Gutters - Standards 2302, 2305 and 2307

3. Gutter Removal, Widening, Bituminous Shoulders - Standard 2311

4. Bituminous Surface Removal Variable Depth and Butt Joint (on existing pavement) -Standard 2306

5. Bituminous Surface Removal (on shoulders) - Standard 2306 (removed with Bituminous Surface Removal, Operation on the Pavement)

- 6. Reflective Crack Control Treatment, Bituminous Base Course (Variable Depth), Leveling Binder (Machine Method) and Bituminous Concrete Binder and Surface Course - Standard 2306
- Pavement Marking Line Standard 2308

The work in this stage shall not begin until all staged and permanent work is completed from Station 33+150 to 35+225. The work in stage 4, Phases 1 and 2 shall be done in accordance with stage construction details as shown and noted on the plans.

The Traffic Control and Protection for Stage 4 shall be as follows:

- Install Standard 2303 during the construction of bituminous and granular overlays Phase 1: of the existing pavement from Station 32+950 to 33+150. Drums, as indicated in the plan details, shall be installed on the granular overlay at the centerline and edgelines. The drums placed on the centerline shall be equipped with bi-directional steady burning lights. A R4-7(1824) sign shall be installed on the first drum at centerline for each direction of traffic.
- Using Standard 2303 for Traffic Control construct the northbound shoulder and the Phase 2: pavement as indicated in the detailed plans. After the proposed base course and northbound shoulder are completed to the designated thickness, install Traffic Control Standard 2310 with the following modifications: No Type III barricades will be required; no Detour Ahead [W20-2(0)-48] signs will be required, one each W1-4L(0)=48 and W1-4R(0)-48 and two W13-1(0)-2424 will be required; no W1-6L(0)6030 or W1-6R(0)-6030 will be required, and two W-6-3 will be required and placed as the last sign in sequence.
- After traffic has been placed on the new alignment, Traffic Control Standards 2311, Phase 3: 2302 and 2305 shall be installed as appropriate for the detour removal.

Stage 5:

The work in this stage shall not begin until traffic has been shifted to the temporary alignment between Station 32+835 and 33+449.800. Complete the pavement removal, earthwork, subbase granular material, bituminous pavement and shoulders, guardrail, pavement markings, structure removal and all other remaining items.

Traffic Control and Protection for Stage 5 shall be as follows:

Phase 1: Traffic shall operate under Standard 2310 from Station 32+835 to 33+449.800 with Standard 2303 used if it is necessary to temporarily close one lane to traffic during working hours.

Remove the existing Sangamon River structure. Complete the slopewall removal, pavement removal and the excavation of the existing embankment from LT Station 33+675± to LT Station 33+739±. Complete the riprap for the Sangamon River channel and Pier No. 3. Complete the extension of the proposed north abutment bridge cone to the west and complete the maintenance access road. Close the existing IL 29 pavement to all traffic.

Phase 2: With traffic shifted to the permanent alignment, Standards 2303 and 2306 shall be used to complete the binder and surface courses, bituminous shoulders, guardrail and raised reflective pavement markers. Standard 2308 shall be used for pavement markings.

Stage 6:
Complete the remaining excavation at the wetland mitigation site and the proposed landscaping. Complete the remaining seeding and cleanup on completed IL 29 under Traffic Control and Protection, Standards 2302, 2305 and 2307.

AGGREGATE FOR TEMPORARY ACCESS (MODIFIED):

This work shall consist of furnishing, transporting, placing, compacting, removing, stockpiling and disposing of Aggregate for Temporary Access for the purpose of maintaining access for entrances onto the traveled pavement and at other locations directed by the Engineer n accordance with Article 107.09 of the Standard Specifications, except as note herein.

Aggregate Surface Course, Type B shall be installed and shall be gradation CA6 conforming to Article 704.04 of the Standard Specifications.

This shall include, but will not be limited to, the three temporary connectors to the detour from existing IL 29 located at LT Station 34+928.3, 35+079± and 35+127±. The grade lines of these temporary connectors shall be progressively increased with additional aggregate as the IL 29 embankment and pavement are constructed.

The quantities for the proposed 150 mm thick aggregate surface course for the temporary entrance connections to the detour at LT Station 35+079.739 and LT Station 35+126.487 are

TOPSOIL:

foreslopes, backslopes in cuts, earth shoulders, and other exposed areas (including ditch bottoms) shown on the plans and station cross sections to be disturbed with the exception of the detour shall be covered with 100 mm of topsoil. The area back of the proposed modular retaining wall systems shall be covered with 150 mm of topsoil. Topsoil will not be required in the wetland mitigation areas A and B.

This work will be measured and paid for at the contract unit price per square meter for FURNISHING AND PLACING TOPSOIL 100 MM AND 150 MM.

TOPSOIL EXCAVATION:

The topsoil on this section shall be taken from the bottoms and slopes of the proposed wetland mitigation site as shown on the cross sections and as directed by the Engineer.

The topsoil excavation will consume nearly all of the excavation required to construct the bottoms and slopes of areas A and B. The Contractor shall be responsible for excavating the topsoil excavation to the proposed contours of areas A and B as shown on the plans. Topsoil excavation shall not be taken around the perimeter of the area outside the proposed slopes unless otherwise directed by the Engineer.

The stage construction on this section will require the topsoil to be excavated near the completion of each roadway construction stage unless otherwise approved by the Engineer. Due to the period of time between roadway construction stages, the excavated areas of the wetland site shall be seeded temporarily with Seeding, Class 2 and fertilizer unless otherwise directed by the Engineer.

The cost of the staged topsoil excavation will not be paid for separately but will be considered as included in the contract unit price(s) per square meter for FURNISHING AND PLACING TOPSOIL 100 MM AND 150 MM.

SEEDING AND MULCH:

This item consists of preparing the seedbed and furnishing, transporting and placing the seed and other materials required in the seeding operations in accordance with Section 250 of the Standard Specifications, except as described below:

All disturbed areas within the right-of-way, the entrances, levees and temporary easements shall be fertilized, seeded and mulched with the exception of the detour road which shall be seeded and mulched only.

At the locations shown on the plans where IL 29 slopes are, 1:3 or steeper and greater than 1.5 m in height, the slope shall be plowed with 150 mm deep trenches at 900 mm centers parallel to the contours of the fills and cuts in accordance with the details shown on the plans and mulched with Mulch, Method 1. All other IL 29 slopes shall be mulched with Mulch, Method 2 in accordance with procedure 2 as specified in Article 251.03(b) of the Standard Specifications.

At locations shown on the plans the slopes and shoulders on the detour and on the levees and entrances within and outside the limits of the right-of-way shall be mulched with Mulch, Method 2, procedure 2.

The slopes and perimeter area outside the bottoms of areas A and B at the wetland mitigation site shall be mulched with Mulch, Method 2, procedure 2.

Seeding for the above areas shall be as shown on the seeding schedule in the plans and as follows:

- 1. IL 29 slopes: Seeding, Class 2 and Class 4
- 2. Entrances and levees within and outside the limits of the right-of-way: Seeding, Class 2
- 3. Temporary Easements: Seeding, Class 2
- 4. Slopes and perimeter area of the wetland mitigation site: Seeding, Class 4
- 5. Wetland bottom of area B at the wetland mitigation site: Seeding, Class 4B (Modified) as specified elsewhere herein
- 6. The area behind the proposed modular retaining wall system: Seeding, Class 4

To minimize erosion problems, the Contractor shall seed and fertilize the sideslopes as soon as possible.

No seeding shall be done when the ground is frozen, muddy or excessively wet.

The cost of the plowed 6" trenches, as described above and shown on the plans, will not be paid for separately but will be considered as seedbed preparation and included in the contract unit price(s) per hectare for SEEDING, CLASS 2 and SEEDING, CLASS 4.

SEEDING, CLASS 4B (MODIFIED):

The Seeding, Class 4B (Modified) shall be sown in the area as defined on the plans and shall be completed after all tree planting has been completed for that area. The Seeding, Class 4B (Modified) shall be sown with a rangeland type grass drill and governed by all other guidelines as noted in Article 250.06. The Seeding, Class 4B (Modified) mix shall contain:

FAP Route 658 (IL 29) Section 102(X,BR,B-3,B-4,B-5) Sangamon County

		KG/Hectare	# Per Acre (PLS)
Canada Wild Rye (Elymus Canadensis)		4	4
Reminia VVIId RVE (EIVMUS VIIGINICUS)		2	2
Cord Grass (Spartina Pectinata)	•	2	2
Due Joint Grass (Calamagrostis	+ 5.	••	
Canadensis)		2	2

Basis of Payment: All costs incurred in complying with this special provision shall be included in the cost for SEEDING, CLASS 4B (MODIFIED), which price shall be payment in full for preparing the planting area, for furnishing, transporting, handling, storing and placing plant materials, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

WETLAND TREE PLANTING:

All trees will be planted prior to the installation of the Wetland Herbaceous Rootstock and Seeding, Class 4B (Modified).

WETLAND TREES:

All wetland trees will be 5 gallon (19 liters) container grown with a minimum of 3/4" - 1" caliper and minimum height of 8' (2.4 m). Balled and burlapped (B&B) plants may be substituted.

<u>Tree Guard:</u> Each wetland tree will be wrapped with a vinyl tree guard having a minimal diameter of 1.5" (38 mm) and a minimal length of 24" (600 mm). Payment of the tree wrap will be considered incidental and incorporated into the price of each tree and will include all material and labor to furnish and install these products as directed.

All trees will be mulched according to Article 253.11 except <u>no</u> weed barrier fabric will be required. No fertilizer will be required.

WETLAND ROOTSTOCK:

This work shall consist of preparing planting beds and furnishing and planting herbaceous wetland plants of the species specified, complete and in place at the locations and in the patterns designated on the plans or as directed by the District Landscape Architect, as described below. The wetland rootstock plantings will be planted in the wetland area. Revegetation of the project site shall be carried out by the Contractor according to the Standard Specifications (where applicable) and the following special provisions.

Section 102(X,BR,B-3,B-4,B-5)
Sangamon County

Materials. Wetland plants shall consist of rhizomes (roots), tubers, sprigs, plugs, of specified izes. Each plant shall possess at least one viable shoot or growing point capable of initiating bove ground growth. Plugs are cubes or cylinders of soil containing crowns, stems, roots and hizomes. The diameter of plugs shall be 2½" (63 mm) or more; depth shall be sufficient to contain rhizomes and the majority of the fibrous root system. Entire plugs shall be used as planting units.

Green aerial growing shoots when present shall be trimmed to within 3" (76 mm) above the growing point before being transplanted.

<u>Substitution:</u> Where evidence is submitted that a specified plant cannot be obtained, substitution may be made upon approval of the District Landscape Architect.

<u>Planting Approval:</u> All plant material shall be subject to the approval of the District Landscape Architect. Plants shall be true to name and conform to all other specifications. Plant material may be inspected at the grower's nursery. approval of plants at the source does not alter the right of rejection at the project site.

All plant material shall be dug and handled with care and skill to prevent injuries and shall be packed in an approved manner to ensure arrival at the project site in good condition. Such material shall be kept moist and cool and shall show no evidence of injury, molding, rotting or drying directly prior to planting.

All plants rejected at the plant site shall be replaced with acceptable plants of the same species unless directed by the District Landscape Architect.

Table 1 Wetland Plantings

Common Name Swamp Milkweed Rice Cutgrass Joe Rye-weed Prairie Cordgrass	Botanical Name Asclepias incarnata Leersia oryzoides Eupatorium maculatum Spartina pectinata	<u>Size</u> rootstock rootstock rootstock	Quantity 4800 4800 4800 4800
Blue Joint Grass	Calamagrostis canadensis	rootstock	4800

<u>Planting Zone:</u> the wetland planting zones are to be located as defined in the plans and shall be marked in the field as directed by the Engineer.

<u>Planting Time:</u> wetland plant materials shall be transplanted between March 1 and April 30. Any other planting time shall require written permission of the District Landscape Architect or Staff Ecologist. Unless otherwise approved, planting shall not take place when the ground or overlying water is frozen or when conditions are otherwise unsatisfactory for planting. No wetland rootstock will be planted until all tree planting has been completed.

FAP Route 658 (IL 29) Section 102(X,BR,B-3,B-4,B-5) Sangamon County

pelivery and Temporary Storage: At least 5 days prior to each delivery of plant material to the storing or project site the Contractor shall notify the District Landscape Architect or Staff **Eco**logist of such contemplated delivery.

Insofar as practicable, transplanting of rootstocks shall occur on the day of delivery at the project site. In the event this is not possible, the plants shall be temporarily stored in a well ventilated, cool storage place and shall be adequately protected against drying. This storage period shall not exceed 48 hours for any rootstocks.

Any previously accepted plant material that has become damaged during on-site storage shall be replaced by the Contractor.

<u>Planting Layout:</u> Planting zone boundaries shall be shown on the plans and marked in the field as directed by the Engineer or the District Landscape Architect. Rootstocks shall be planted in the wetland area as shown on the plans. The species listed in Table 1 shall be planted in this zone as described. No rootstock shall be planted under more than 1½ (450 mm) of water.

<u>Planting Method:</u> Tubers and rhizomes lacking or with limited fibrous root systems may simply be pushed into areas with soft substrates. In firmer substrates, planting holes shall be opened with dibbles, spades or other suitable tools. The exact procedure shall be dictated by soil texture and shall be approved by the District Landscape Architect.

Plants shall be transplanted in their natural orientation 1"-4" deep or as specified by the supplier. Holes shall be made large enough to accommodate roots spread out to their approximate natural position. Each plant shall be so set in the ground after the planting hole is closed and soil firmly around the plant that it will stand at approximately the same depth it stood in the nursery or field.

<u>Care:</u> Freshly planted rootstock and new growth shall not be disturbed by subsequent activities that would cause uprooting, displacement or injury. During periods of intense heat or subnormal rainfall, supplemental watering may be required in accordance with the applicable requirements of Section 655.09 of the Standard Specifications.

Method of Measurement: Wetland rootstock plantings will be measured by the number of units of plants complete in place and accepted in accordance with the terms of this item. One unit of plants is equal to 1,000 plants.

Basis of Payment: all costs incurred in complying with this special provision shall be included in the cost for the size of plant specified in Table 1, which price shall be payment in full for preparing the planting area; for furnishing, transporting, handling, storing and placing plant materials; and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

COVER SHEET MAINLI .E TYPICAL SECTIONS

DETOUR TYPICAL SECTIONS
SUMMARY OF QUANTITIES

SCHEDULE OF QUANTITIES PIPE CULVERT SCHEDULE SURVEY TIES AND BENCHMARKS

RIGHT-OF-WAY PLANS TREE REMOVAL DETAILS

DITCH RIPRAP DETAIL

SOIL BORING LOGS

118-120 LIGHTING PLAN DETAILS

MAINLINE PLAN AND PROFILES DETOUR PLAN AND PROFILES
CHANNEL CHANGE PLAN AND PROFILES TEMPORARY ENTRANCE AND LEVEE PROFILES FINAL ENTRANCE AND LEVEE PROFILES

STAGE CONSTRUCTION DETAILS

PUMP HOUSE PIPE EXTENSION DETAILS. LEVEE CONTOURS & MANHOLE DETAIL

TRANSVERSE PIPE UNDERDRAIN DETAIL PIPE DRAIN DETAILS
PRIVATE ENTRANCE DETAILS

MODULAR RETAINING WALLS DETAILS

TRAFFIC BARRIER TERMINAL DETAILS 114-115 EXISTING SANGAMON RIVER BRIDGE PLANS

SANGAMON RIVER RIPRAP DETAIL
STRUCTURE REMOVAL & TRENCH BACKFILL DETAIL

TYPE A GUTTER DETAILS
FABRIC FORMED CONCRETE REVETMENT MAT DETAIL

SEEDING DETAIL
WETLAND MITIGATION AND TREE REPLACEMENT CETAILS
FIELD TILE REPLACEMENT DETAIL

INDEX OF SHEETS

38-4F

80-82

B3+84A

95-98

SECTION I COUNTY

658 102(XBRS-3,8-4,8-5) SANGANON 307 1 FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT #

* A CBN - ACSTPF - 658 (13)

Te21000

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.P. ROUTE 658 (IL 29) SECTION 102(X,BR,B-3,B-4,B-5) PROJECT (ACBRF-ACSTPF)-658 (13)

SANGAMON COUNTY

C-96-516-93

D-96-512-92

ACSTPF SECTION 102 (X,BR,B-3 B-4,B-5)

ACSTPE

ACBRE ENDS STA. 34+100.35

BEGINS STA, 34+100.35

SECTION 192 (B-4)

SECTION 102 (B-3)

STA. 33+589.55

S.N. 084-0207

STA, 34+056,15

(S.N. 084-0206)

LOCATION OF SECTION INDICATED THUS:-

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION August 2 19.96 ENGINEER OF DESIGN AND ENVIRONMENT

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

DESCRIPTION OF MICHAUS

PLAN SHEETS

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS

DESIGN DESIGNATION: 1615(28) ARTERIAL 3.81 (8IT-20) ADT = 10.500 (2008)

Sheets 1 Thru 100 (Set 1 of 3)

CONTRACT NO. 92377

SANGAMON COUNTY SECTION 102(XER.B-3.B-4,B-5) F.A. ROUTE 558

A Revised 8/16/96

121-122 MISCELLANEOUS DETAILS 123 ROAD CLOSURE DETAIL
124-153 SANGAMON RIVER BRIDGE STRUCTURE PLANS 154-169 SANGAMON RIVER OVERFLOW BRIDGE STRUCTURE PLANS 1170-1720) UNAMED TRIE OF SANGAMON RIVER STRUCTURE PLANS 247-261 DETOUR CROSS SECTIONS 252-263 EROSION AREA AT STA 32+845.000 CROSS SECTIONS 264-285 ENTRANCE CROSS SECTIONS 286-296 CHANNEL, LEVEE & SERVICE RD CROSS SECTIONS 297-307 WETLAND CROSS SECTIONS STANDARDS 2305-9 2396-1 ACSTPF SECTION 102 (X,BR,B-3,B-4,B-5) 2113-4 2307-10 2397-2 2228-5 2310-8 2430-1 2443-3 ENDS AT STA. 35+225 2311-12 2298-12 2341-10 2301-6 2362-4 2449-1 SECTION 102 (B-5) 2364-3 STA. 35+057.996 (S.N. 084-2038) METRIC RATIOS SECTION BR STA. LT. 34+020 (S.N. 084-0035) ACSTPF ENDS STA, 32+923,377 ACBRE BEGINS STA. 32+923.377 ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

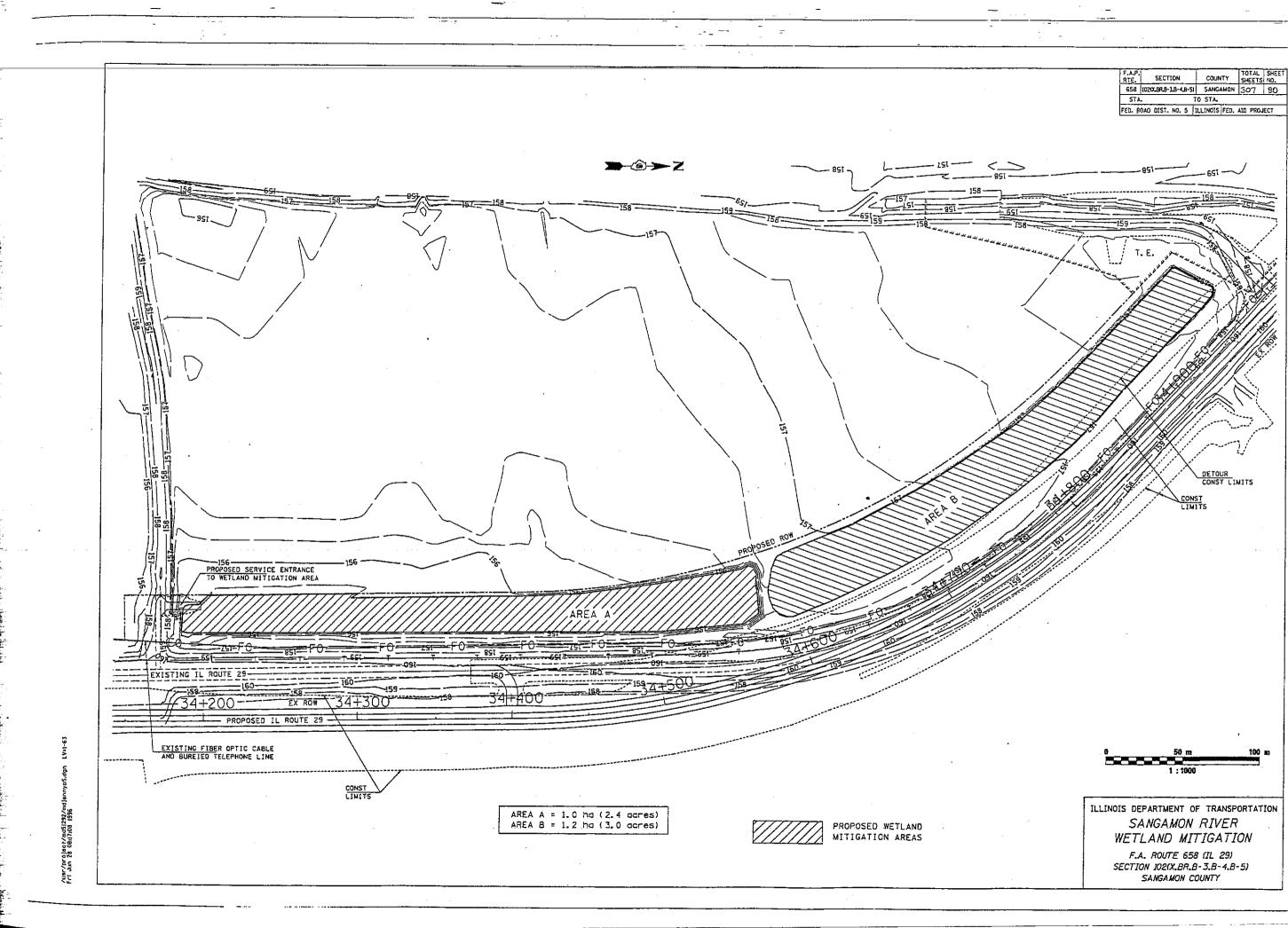
NET LENGTH OF SECTION 102X 2261.493 M 2 262 KW NET LENGTH OF SECTION 102 5-3 NET LENGTH OF SECTION 102 B-4 NET LENGTH OF SECTION 102 B-5 TOTAL NET LENGTH OF SECTION 2625.000 M NET LENGHT OF PROJECT ACERF

NET LENGHT OF PROJECT ACSTP

268-940 M 0.287 KM 88.400 M 0.088 KM 8.167 M 0.008 KM 2.625 KM 1176.973 M 1.177 KM

REVISED

August 2 19 925



F.A. SECTION

RTE. SECTION

G58 (62(xFRB-3,6-4,8-5)) FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

AREA A

1.0 hectares (2.4 acres) (SEE TREE PLANTING DETAIL)

AREA B

1.2 hectares (3.0 acres) (SEE TREE PLANTING DETAIL)

TREE PLANTING DETAIL

TYPICAL PLANTING SCHEME 25 TOTAL PER 0.10 hectare (1/4 acre) TYPICAL ACRE PLOT TO CONTAIN:

A. 100 TREES

B. SPECIES

1 SHELBARK HICKORY
2 RIVER BIRCH
3 GREEN ASH
4 PIN OAK

5) SWAMP WHITE OAK

C. SPACING ± 6 m × 6 m (± 20' × 20')

D. DISTRIBUTION - RANDOM

NOTE: NOT TO SCALE

TREE SCHEDULE

		· · · · · · · · · · · · · · · · · · ·						
QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE *					
	SHELLBARK HICKORY	CARYA LACINIOSA	19 L (5 GAL)					
110 EA	RIVER BIRCH	BETULA NIGRA	19 L (5 GAL)					
110 EA		FRAXINUS PENNSYLVANICA	19 L (5 GAL)					
110 EA	GREEN ASH	QUERCUS BICOLOR	19 L (5 GAL)					
110 EA	SWAMP WHITE OAK		19 L (5 GAL)					
110 EA	PIN OAK	QUERCUS PALUSTRIS	13 C (2 ONC)					

ALL 19 LITER (5 GAL) SIZE TREES SHALL HAVE A MINIMUM OF 19 mm - 25 mm (3/4" - 1 ") CALIPER AND HAVE A MINIMUM HEIGHT OF 2.4 m (8 FEET)

TREE PLANTING SPECIFICATIONS

- 1. ALL TREES TO BE RANDOMLY MIXED.
- 2. ALL TREES SPACED ± 6 m X 6 m (20' X 20') AND PLANTED AT A RATE OF 100 TREES PER 0.4 hectares (1 acre).
- 3. ALL TREES TO BE MULCHED.
- 4. ALL TREES TO BE PROTECTED WITH VINYL TREE GUARD.

NOTE: ALL TREE PLANTING WILL BE COMPLETED PRIOR TO INSTALLATION OF ROOT STOCK AND SEEDING. CLASS 4B (MODIFIED).

 NAME	ILLINOIS DEPARTMENT OF TRANSPORTATION.
	WETLAND TREE PLANTING
	PLAN
	F.A. ROUTE 658 (IL 29) SECTION ID2(X,BR,B-3,B-4,B-5)

STA. FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT PLANT SCHEDULE AREA A = 1.0 hectares (2.4 acres) SIZE BOTANICAL NAME 1. TO BE PLANTED * WITH MIXTURE OF WETLAND COMMON NAME AREA ZONE QTY AQUATIC PLANTS (ROOT STOCK OR PLUGS). UNITS ha (AC) ROOTS OR PLUGS ASCLEPIAS INCARNATA 2. PLANTED AT A RATE OF 10000 PLANTS PER O. 2 (O. 48) SWAMP MILKWEED ROOTS OR PLUGS 4, 8 LEERSIA ORYZOIDES O. 4 hectares (1 acre) WITH A MINIMUM 0. 2 (0.48) | RICE CUTGRASS ROOTS OR PLUGS 4.8 OF 600 mm (2 FEET) BETWEEN PLANTS. EUPATORIUM MACULATUM 0.2 (0.48) JOE PYE-WEED ROOTS OR PLUGS 4.8 3. ALL ROOTS TO BE PLANTED OUTSIDE OF THE SPARTINA PECTINATA 0.2 (0.48) PRAIRIE CORDGRASS ROOTS OR PLUGS CALAMAGROSTIS CANADENSIS 4.8 D 0.2 (0.48) BLUE JOINT GRASS TREE WELLS. NOTE: * ALL WETLAND PLANTS TO BE INSTALLED AFTER TREE PLANTING HAS BEEN COMPLETED. NOTE: 1 UNIT = 1000 PLANTS 0 0.1 A 0.1 ha B 0.1 hc B 0. 1 ha
E 0. 1 ha
D 0. 1 ha
C 0. 1 ha A 0.1 ho AREA A SEEDING, CLASS 48 (MODIFIED) 1.2 hectares (3.0 acres)

Jusr/project/md51292/if Fri Jun 28 Gölfh4T 1996

AREA B = 1.2 hectares (3.0 acres) CLASS 4B (MODIFIED) SEEDING

NOTE: SEEDING TO BE COMPLETED AFTER TREE PLANTING.

AREA B

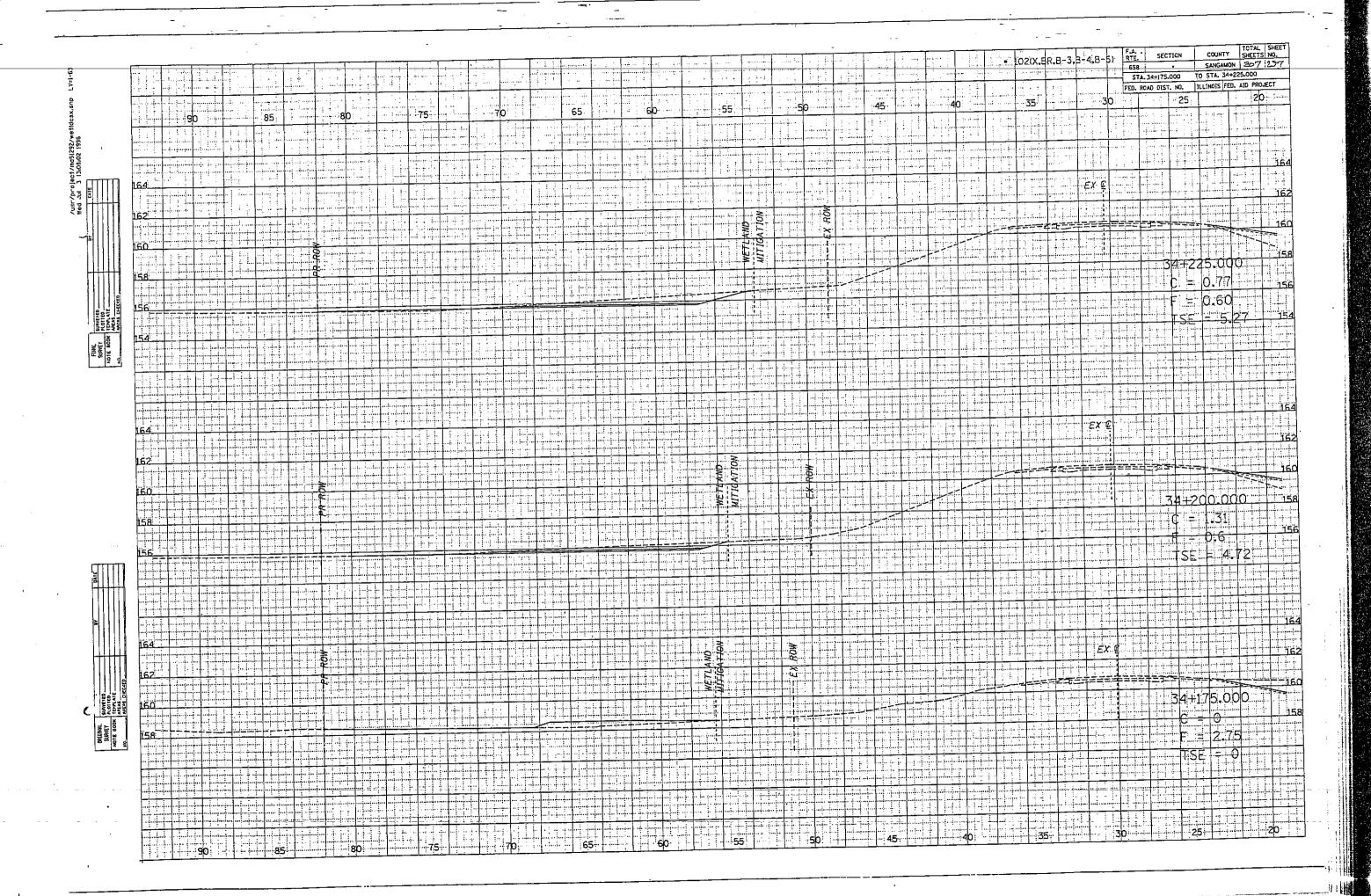
ILLINOIS DEPARTMENT OF TRANSPORTATION WETLAND SEEDING AND

TOTAL SHEET SHEETS NO. 307 92

F.A. SECTION 559 (224,88,8-58-4,8-5)

TO STA.

FORB PLANTING PLAN F.A. ROUTE 658 (TL 29)
SECTION 102(X,BR,B-3,B-4,B-5)
SANGAMON COUNTY



.

20 ...

25...

COUNTY SHEETS NO.

SANGAMON 307 299 • 102(X,BR,B-3,B-4,B-5) F.A. SECTION 658 STA 34+325.000 TO STA 34+375.000
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT 45 35 55 65-60 --- 50 75 WE TLAND MITIGATION FINAL SLAFFED SLAFFED NOTE 600 TEPPLATE AREA (SCREE) C = 2.14 ONIGIIAN, SIMMETED SURVEY PLOTED HOTE BOOK TEMPLATE NO. AREAS CHECKED. -55 85 65 45 :35...

_- _ --

COUNTY SHEETS NO.
SANGAMON 307 301 F.A. . RTE. SECTION 102(X,BR.B-3,B-4,B-5). STA 34+475.000 TO STA 34+525.000 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT - 25 20 45 35 · · · · 30 · 75 -55 65 85 r/project/mds,...32/we/ DETOUR & 162 EX € 162 \$ 158 160 34+525.000 156 SURVEY SURVEYED SURVEYED SURVEYED SURVEYED PROTE BOOK PER-LATE AREAS CHECKED FFO TSF = 17.92 DETOUR EEX E 162 WETLAND MITTER TION __160 POW STAGE 4 2.8% , Ę X -134+5c0.0d0 n = 2.91 EXE DETOUR 4: WETLAND MITIGNITION ROW OKIGINAL SLAWETED SLAWETED SLAWETED ALOTTED HOTTED ALOTTED ALO 160 34+475.000 158_ C = 2.65 TSE -10.88 25 30 20 35 45 :55: 50 75

85

_---

										;		 	LO2(X.ER.B-3	,B-4,8-5)	030	- SANG	NTY SHEETS NO. 5AMON 307 30 344675.000
						-65		60	55	-50	45	-40	-35	-30	STA, 34+625	NO. ILLINOIS	FED. AID PROJECT
	90	85	80	75	70									1 1			
2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3																	
<u>-</u>																	
	162												LAND GATION			ρι	
SANKETO P. GITTO TEMPLATE AMERS CHÉSTEO	160			P ROW									WE'TL				TOUR C
FINA SURVET P. 01 NOTE BOOK AFEA	158			,													
2 DO 04	156														3	1+675.0	
																TSE =	3.81
													8				DE TOUR E
	160												TIGATIC				100
	158												3//		1.07.	TAGE 4	A.5
·	156															4±650. C = 2.	
BATE																F = 1.2	25
10																	
	164												 8				DETOUR €
			ROW														1 7 7 7
CRIGINAL SIAMETED SUPER PROTIED TO THE BOOK TREATED AREAS FOR	160 158		##										 * 3		462	STAU	1.4.5
E CONTRACTOR	156															34+625 (r = 2	000
•																r ÷ þ.	94
				75		والمسارية والمسارية	5						35:		30		2.55

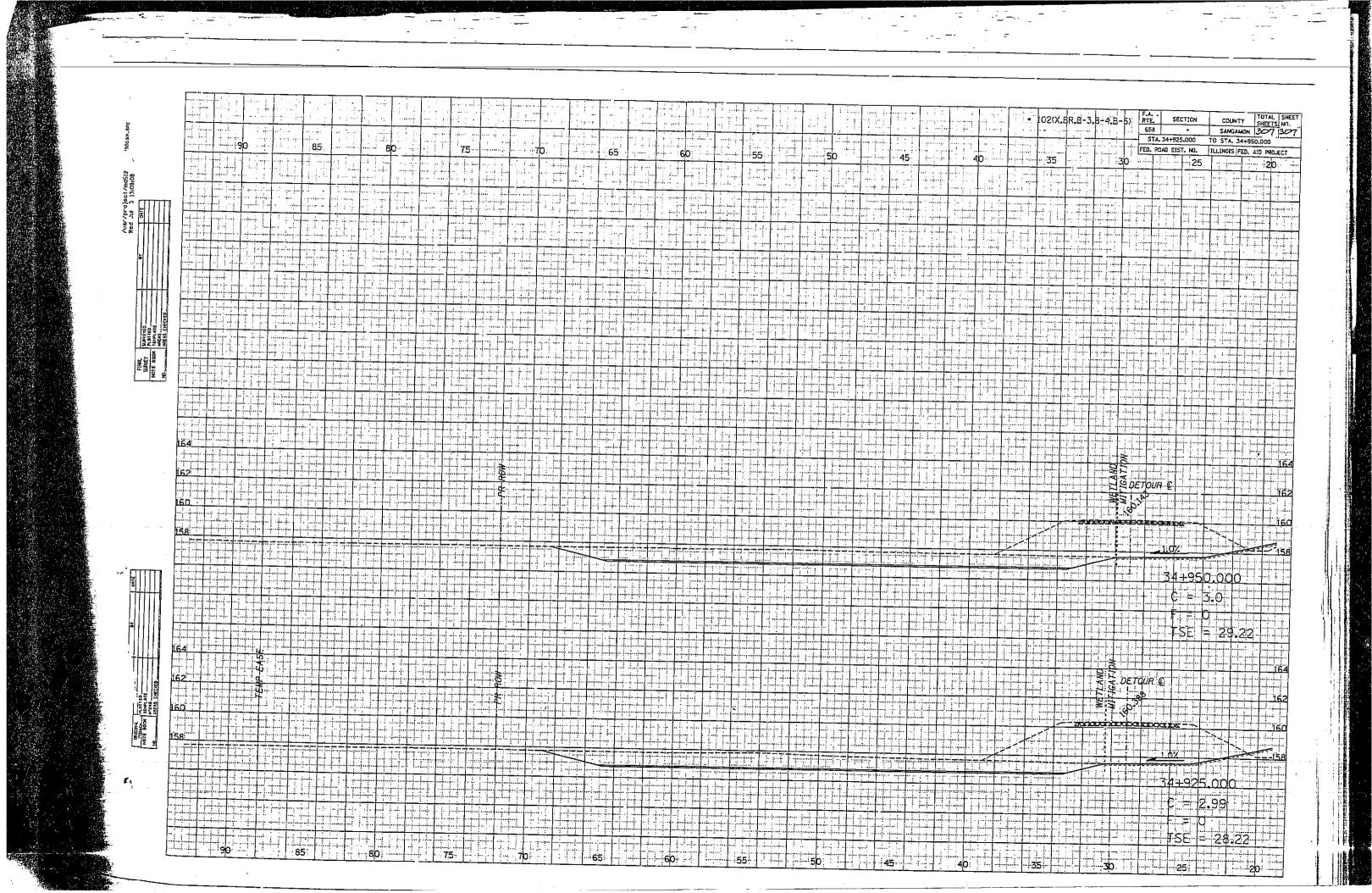
.-_ --

: -

COUNTY SHEETS NO.
SANGAMON 307 304 102(X,BR,B-3,B-4,B-5) SECTION 658 STA 34+700.000 TO STA 34+750.000 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT 45 20 25 35 30 -55: 70 65: 75 85 FIRST SUNFFEED STATES TO THE SUNFFEED STATES TO THE SUNFFEE SUNFFEED STATES THE SUNFFEED STATES THE SUNFFEED SU 158 DETOUR Q 160 -1.0% DETOUR & Official Surface Surface Autor at Autor ZOTO TO THE PARTY OF THE PARTY 160 34+700.000 C = 2.59 FSE 25 -20 30 35 45.

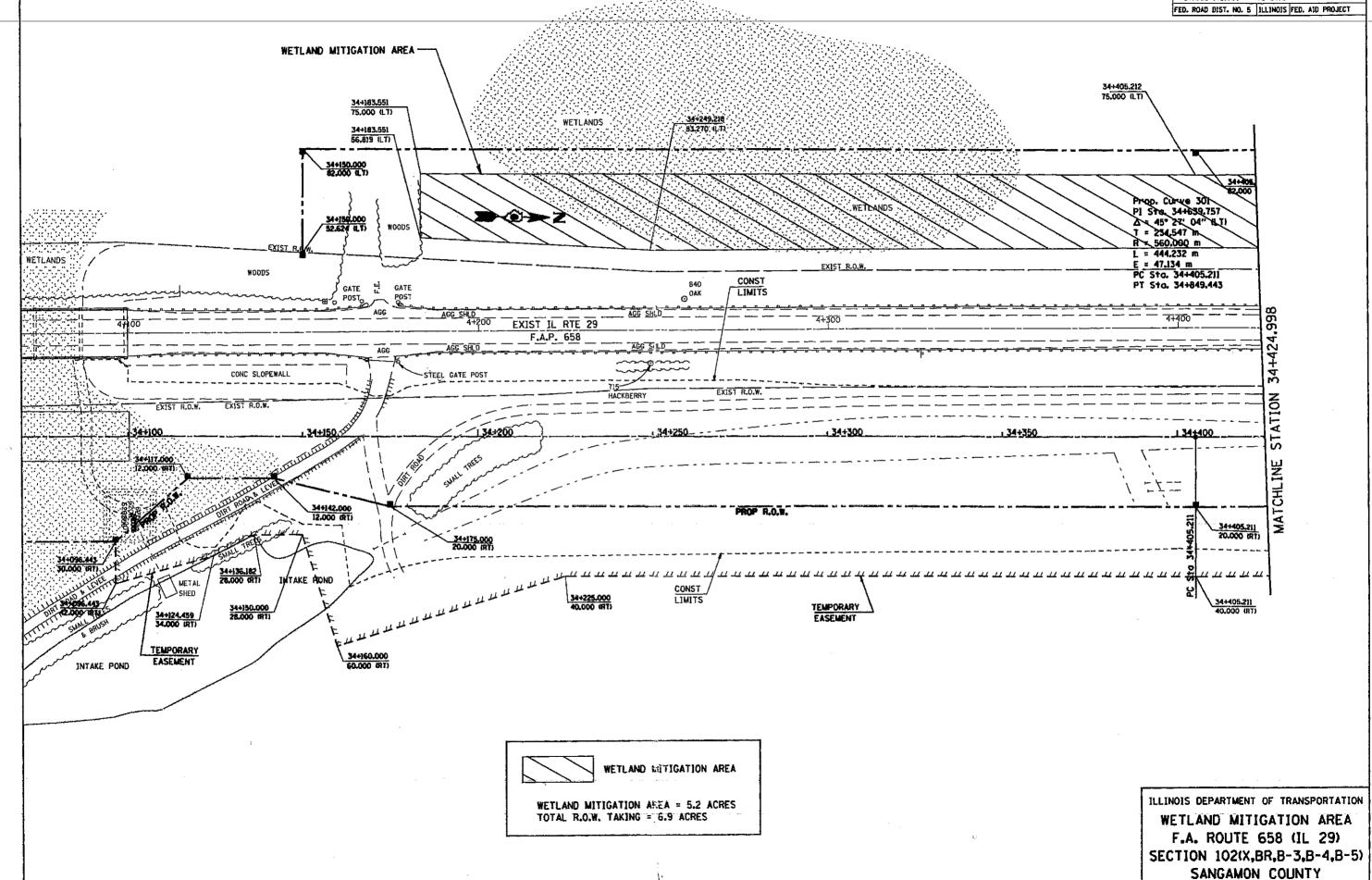
COUNTY TOTAL SHEET SHEETS NO. SANGAMON 307 305 658 STA- 34+775-000 TO STA. 34+825.000 85 FED. ROAD DIST. NO. | JLLINOIS FED. AID PROJECT 75 65 -60 55 45 ...35 20 FUNI SAREY RANTEGO. NOTE BOOK PREASE NO. WETLAND WITTGATJON DETOVA C 160 34+800.000 DETOWN C 162 ORIGINAL SUMPERED SUMPERED NOTE BOOK AFFECTION =-0 SE F 13.51 55 25

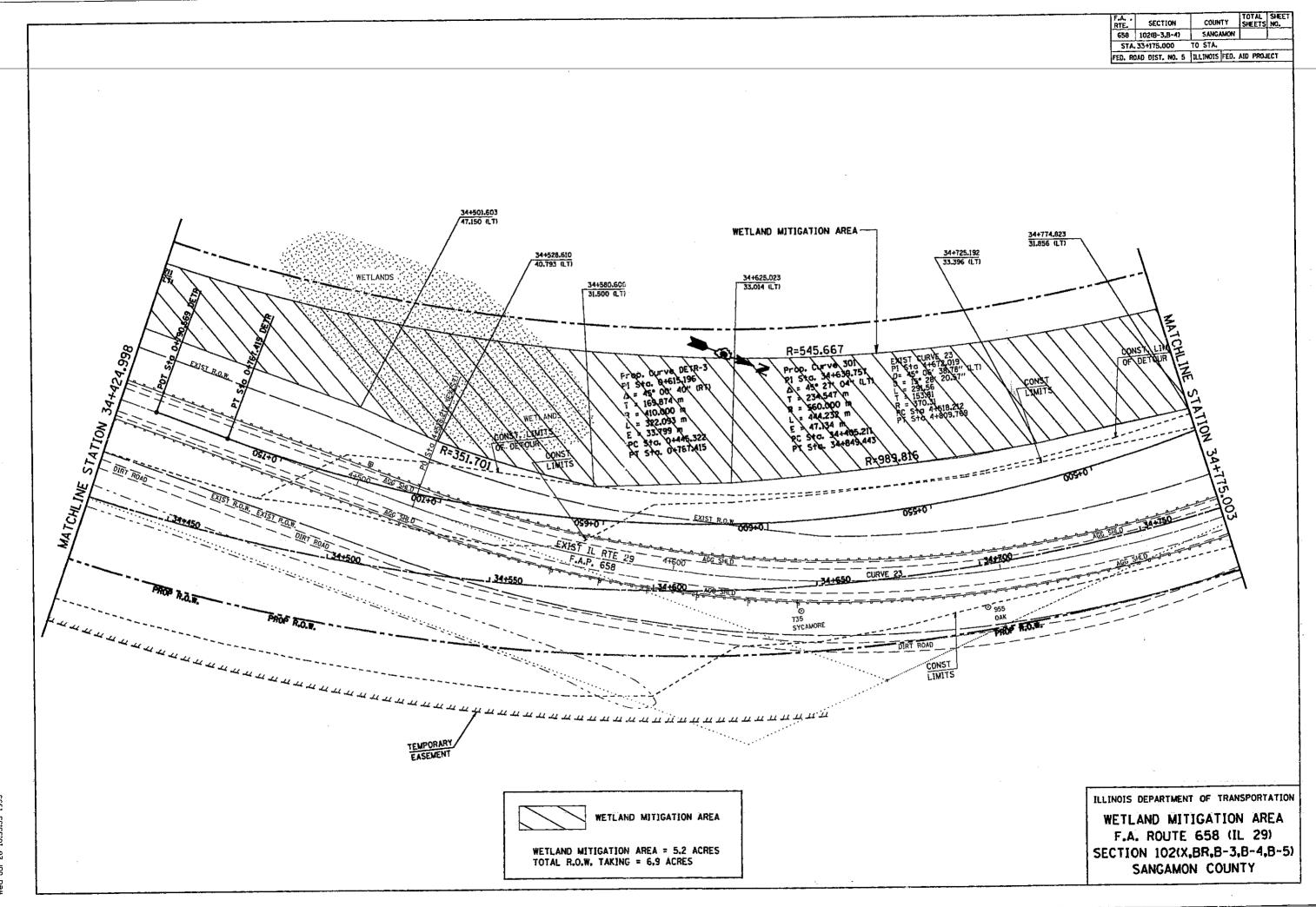
20



F.A. SECTION 658 102(B-3,B-4) SANGAMON STA. 33+175.000 TO STA. FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT 34+405.212 75.000 (LT) Prop. Curve 301
PI Ste. 34+639,757

\$\Delta \text{45}^* 22' 04" B.TI
\$T = 254,547 m.
\$R \times \text{560,090 m}\$
\$L = 444,232 m\$
\$E = 47,134 m\$
\$PC \text{ Sto. 34+405,211}\$
\$PT \text{ Sto. 34+849,443}\$ STATION ILLINOIS DEPARTMENT OF TRANSPORTATION WETLAND MITIGATION AREA F.A. ROUTE 658 (IL 29) SECTION 102(X,BR,B-3,B-4,B-5) SANGAMON COUNTY





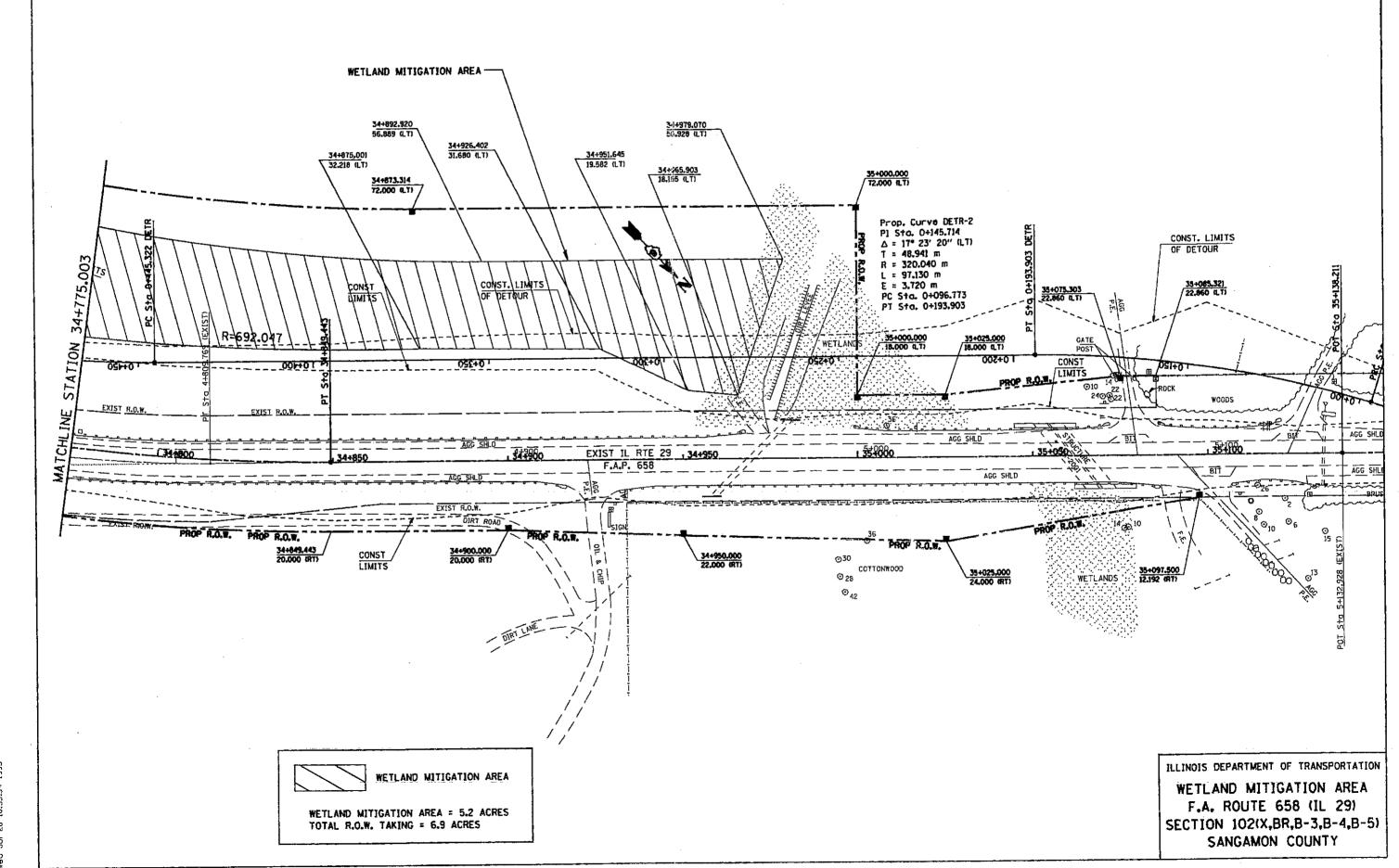
/usr/project/md5i292/md5i292pa.dgn LV=i. Wed Jul 26 10;55;33 1995

F.A. SECTION COUNTY SHEETS NO.

658 102(B-3,B-4) SANGAMON

51A. 33+175,000 TO STA.

FEO. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT



/usr/project/md51292/md51292pa.dgn LV=1-63 Wed Jul 26 10:55:34 1995